

## **CHAPTER - I**

### **INTRODUCTION**

- 1.1 Introduction.**
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- 1.3 Objectives of the Study.**
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CHAPTER - IINTRODUCTION1.1) INTRODUCTION :

Each nation is interested in bringing up the growth rate with a view to solve economic problems and to raise the standard of living. This is possible only when there is increased production over a given period of time. This growth in production is possible when production factors are efficiently employed. Productivity has a big role to play in increasing production per unit of input. But it will be wrong to think that increase in production is right criteria for measuring economic growth. Increased production must be accompanied by reduction in the cost of production of every additional unit, which means higher productivity.

Increased productivity enhances the total volume of production and brings down the cost of production which in turn help to increase the demand for product to achieve common objective i.e. maximisation of profit. Higher productivity ensure greater stability to the concern and help to take expansion projects in changing environment which demand more investment, offers wide-spread market and prosperity to the organisation. Thus, higher productivity is not only beneficial to the concern but also beneficial to the workers in the industry, consumers and finally to the nation.

The workers, productivity yields more wages, shorter working hours, better standard of living, better working conditions, improved morale and greater satisfaction both inside and outside the workers.

To consumers, productivity ensures lower prices, better quality and greater satisfaction.

To the nation, productivity ensures greater national wealth, larger per capita income, improved standard of living, better utilisation of resources, expansion of an international market with the help of standardised goods and services. Since the measurement of productivity is a pre-requisite of improvement of productivity. The question arises as to which is the best approach to measure the productivity.

#### 1.2) APPROACH TO THE STUDY :

In India, co-operative sugar factories are playing an important role, co-operative sugar movement is conducted in the area of socio-economic development in rural area. Co-operative sugar factories are being considered as growth centres. Economic growth is closely linked with industrial productivity and this is important both at local, national and international level.

Productivity in sugar industries is, the indicator of country's economic and industrial growth which helps in measuring the magnitude of economic changes and forecast economic conditions, and their prospects. The higher is the productivity, the lower is the cost and this result into higher profit. To achieve this goal stress must be given

to the management of productivity because industrial productivity is influenced by many factors, namely -

- i) Technological factors
- ii) Financial factors
- iii) Natural factors
- iv) Sociological factors
- v) Managerial factors
- vi) Government factors
- vii) Size of industrial unit
- viii) Quality of labour force.

It is the responsibility of management to control over the above side factors in order to improve the productivity.

It is observed that though productivity is useful for industrial development and economic growth, yet in actual practice it is difficult to measure it. This difficulty becomes still more serious. So far no yard-stick has been found to measure productivity. But this does not mean that its importance in any way can be under estimated. With the help of available techniques of measuring productivity researcher attempted for exploring the best approach for productivity measurement with special reference to Vasant-dada Shetakari Sahakari Sakhar Karkhana Ltd., Sangli, a sugar factory run on co-operative principles.

### 1:3) OBJECTIVES OF THE STUDY :

The researcher undertaken this case study with the following specific objectives.

- a) To study operating style of a sugar factory run on co-operative principles i.e. Vasantdada Shetkari Sahakari Sakhar Karkhana Ltd., Sangli.
- b) To measure the productivity of the unit under study.
- c) To evolve best approach for productivity measurement for the unit engaged in sugar industry.
- d) To suggest ways and mean to improve the productivity of the organisation under study, if required and possible.

### 1:4) METHODOLOGY :

The methodology adopted for the study is a case study method. Being a suitable researcher has deliberately selected only one sugar industry run on co-operative basis i.e. Vasantdada Shetkari Sahakari Sakhar Karkhana Ltd., Sangli. This study expect only for exploring the best approach for productivity measurement. Researcher has also selected a recent period for study i.e. from 1985-86 to 1989-90. Management of productivity is related to the scientific management and hence it is also considered to focus on the management of the sugar factory.

To achieve the above stated objectives i.e. to measure the productivity ratio analysis technique is

adopted which is a management accounting tool.

Productivity is influenced by various factors, but only following factors are considered.

- |             |                                |
|-------------|--------------------------------|
| 1. Labour   | 5. Power and Services          |
| 2. Machine  | 6. Return on Capital Employed. |
| 3. Material | 7. Other Productivity.         |
| 4. Capital  |                                |

Labour productivity is measured -

- i) In terms of hours and
- ii) In terms of Revenue.

While calculating machine productivity output and actual machine hours are considered. For calculating material productivity only material cost (Sugarcane + Carriage) and number of bags produced are taken into account. For measuring capital productivity following ratios are used.

- i) Proprietors' Ratio.
- ii) Capital Employed to Fixed Assets.
- iii) Current Ratio.
- iv) Liquid Ratio.
- v) Current Assets to Fixed Assets.
- vi) Capital Gearing.

While calculating productivity relating to power and services only machinery repairs and maintenance cost and number of hours are considered.

For calculating return on capital employed under -mentioned ratios are utilised.

- i) Gross Profit Ratio
- ii) Net Profit to Sales
- iii) Net Profit to Fixed Assets
- iv) Net Profit to Net Worth
- v) Stock Turnover

For other productivity only cost of sales to sales ratio is considered.

In order to study the productivity problem data is collected with two different sources.

- a) Primary Source
- b) Secondary Source.

Primary source of information is the origin of data which contains personal interview, face to face discussions, etc.

Secondary source of information

The information from kept records, journals, magazines, newspapers, annual reports, etc.

Required data collected is of last five years which help in making proper analysis to conclude rationally.

For presenting the information tables, 4 line-graphs, 9 bar-graphs and 4 charts are used.

#### 1:5) DATA COLLECTION :

Researcher has collected the relevant data from 60th the sources.

- a) Primary Data : The primary data is collected mainly

through an observation and discussions with the Managing Director, Labour Welfare Officer, Mechanical Engineer, Chief Chemist, Public Relation Officer, Chief Accountant, Auditor, workers and concerned staff of the sugar factory. Information is also collected by inspecting the record of the concerned departments of the factory.

b) Secondary Data : Secondary data is mainly collected from the annual reports, final manufacturing reports and hand-book of the said sugar factory. Information is also collected from the published materials like daily newspapers, journals, magazines, periodicals, articles and through an extension library research.

#### 1.6) SCOPE AND LIMITATIONS :

A) Scope : Scope of the study is very limited as it is concentrates only on Vasantadada Shetkari Sahakari Sakhar Karkhana Ltd., Sangli for the sake of study. It is not possible to compare the productivity with other competitive co-operative sugar factories. Therefore, conclusion may not be 100% accurate.

As considering the importance and utility of productivity, this study is beneficial to -

1. Workers
2. Management
3. Shareholders
4. Government
5. Industries
6. Creditors,
7. Financial institutions
8. Research persons
9. Investors.

B) Limitations : As it has already been stated that productivity is closely linked with economic growth and



essential for raising the production per unit. Productivity has its own significance at National, International and even at local level but due to limitations of time and money. Only one co-operative sugar factory is selected. It is also impossible to measure the productivity since the beginning of the factory i.e. 1956. Therefore, researcher selected only the recent period i.e. 1985-86 to 1989-90.

In this sugar factory, there are various departments but it is not possible to measure the productivity of all departments so only following departments are considered.

1. Production Department.
2. Distillery and Liquor
3. Cattle Feed
4. Acetic Anhydride Division.

#### 1:7) CHAPTER SCHEME :

The present study contains six chapters as detailed below.

<u>C H A P T E R</u> - <u>I</u> :	INTRODUCTION
1.1	Introduction
1.2	Approach to the study
1.3	Objectives of the Study
1.4	Methodology
1.5	Data Collection
1.6	Scope and Limitations
1.7	Chapter Scheme

C H A P T E R - II : REVIEW OF SUGAR IND STRY

C H A P T E R - III : PRODUCTIVITY MEASUREMENT  
AS A MANAGEMENT ACCOUNTING TOOL

C H A P T E R - IV : PROFILE OF THE SUGAR FACTORY

C H A P T E R - V : PRODUCTIVITY MEASUREMENT OF THE  
SUGAR FACTORY.

C H A P T E R - VI : OBSERVATIONS AND SUGGESTIONS.

